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Figure 1

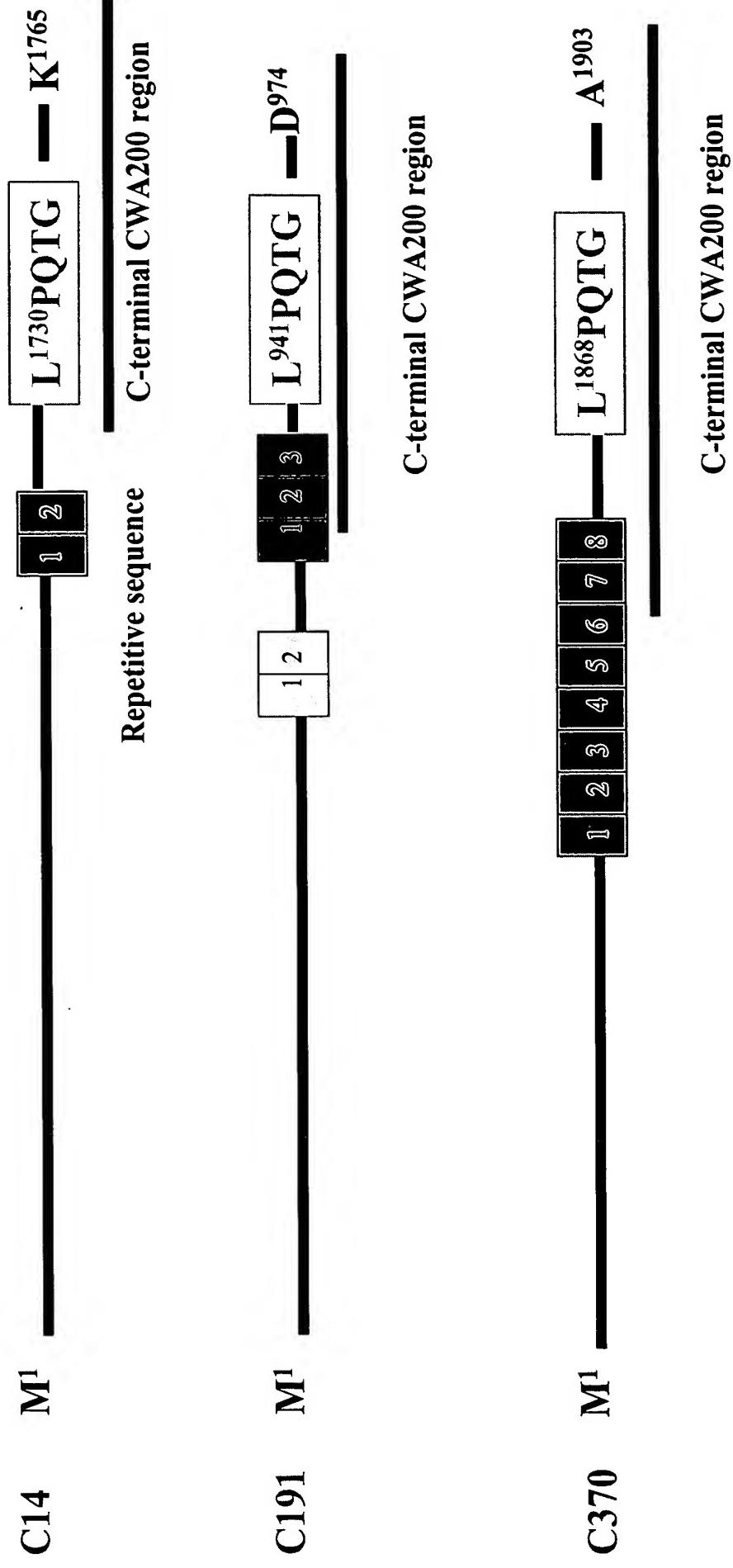


Figure 2A

C14 SEQUENCE RESULTING FROM GENOMIC SEQUENCING OF L. JENSENII 1153 (CWA200 REGION ALONG WITH ANCHOR MOTIF UNDERLINED)

¹MNDSSIGTINITNDITITGKVNLTTSGISDINKHFLYLQSEGSARDLTINGNGHRINFA
GYSIALQNKNYNTNAANPWNITLKDMTIEGSKYDSPISFYGRKSNTENSKLTFDGVT
ANLNDRPLVDKYGENLPVHFAGENNITLNNMSIGYNLVTKTVKFDSGNTTFNVDG
KVTGNSINPDNWVIRSTENASNSENPTSLINEGATVTINAKSDDLRIYAGRQLTAGQ
PIYGVTVINGTLNAKMAAGHSTAIWSHDLEIGKKGNVTIHTKQTQNQADGVENGTSNS
VTNYNGTHYAPISLGVGPISSVASPLSKQTVS LINNGSLTIIRD TAKTLVPLISMGDGS
LSSNTTLKFSVGAGATLDLQDKAGTFRYGIEPSTPLNGLVTLWGTSGTDLL EFLTPAY
VNLQRTGDIRGTLIRMEGVYNSTTVNGPTPVAQWDQGNKTTTPNDVWYVRYLISAN
QWGNNNSGQFMGKDQHPNTVVAKKGVDTLYNSNATVLM SKNQGADKYENGTMPT
EVQQALHLNSFLNNFNFWRPQRMAMGSKLNDNP DVKIDDFDKYHAEAQTIDGTTR
QTLS DLDANKGLKDLIGPDEQPITDFKDIVKHVTWYNSATDKDEWNKIMIQPTDSKD
PSARVPVPEPQNPTGNLKT TDGF AWAKVTYADGSVDFVKIPLKVTEKKYSEELTPSY
PGVSVEQGKSDSVDP SFKDENDKAADAPAGTKYTAGENTPDWIKVDPDTGKVTVSP
TDDTSVGSHDISVTVTYPDSSTDQLTVPVT VTEKS NLAEKYPVSYDKLNVEKPSGDT
PATGA VDPKAAADM PEGAITGYEK GDFDAPAGVTIDVN HDTGKV T ASVGKNATLG
SFEVPVKVTYSDGT AEVKVPV SITGNK VDPGSGDV VYYGDQSMVV FNGNLTTVH
KTTDSHELSAKDSA FQTITYSDWNKKGNIVSDY NKHVIY KLSADG TKYVNEADAT
DSFDASAISFNWQKGYEVNTGVDNFSNGSAD TL YQLEK GAVNSEE QTDANDPSGLA
GNSKYRYDFSISDTNVLQKLGLSPAGYNAWANVYYNFLGATGKINIPVNYGSEVSTD
EAGIKNYLATNSISGKTFVNGNPTGIKWAENGMPGKDGFKAASNMTGIVEFTFDNGT
KLNVQVTFKTGHVSTSGKV NDDTNLYVERTIEYDVTGTGHSPINSVTQKVHYVRD
GYHKINADGTDAGEIIWNEWKLADGQTAEFPEYSVDQITGYDAYINGAKATQVDA
KVAETNGTPQNGQNITVTYKKQN STPV PYKPGKDGVNDAINRYVTR II VKEPGKEP
QTITQTVHFTNEDKDGN SGYKDPVTGEIKYNTDWHVASDLNAKTGSWE EY TAPS V
GYTPSQAKVEAKTVTAETEAASVTISYTKNADIPV PYKPGKDGVNDAINRYVTR II V
KEPGKEPQTITQTVHFTNEDKDGN SGYKDPVTGEIKYNTDWHVASDLNAKTGSWE
YTAPS VTYG YTPSQAKVEAKTVTAETEAASVTISYTKNADIPV PFDPSNKDMYREVTR
TINVVDPITGKISTSVQTAKF TREDKNSNAGYTD PVTGKTTMNPWTPAKQGLRAVN
EQIKGYVAKV DGNVDAVV VTPDSANMV VITYQANKPEGQNI TVKKD TVPDPADGI
KNKDDLPDG TKYT WKEVPDVNSVGEKTGIVTVFPDGTSVDKVTVYVDPV VESN
RDTLSKEANTGNTNVAKAATVTSSKVESKKTL PQTGSKTEQVGILGLAIATVG SLLG
LGVNRKKRQK¹⁷⁶⁵

Figure 2B

**C191 SEQUENCE RESULTING FROM GENOMIC SEQUENCING OF *L. JENSENII*
1153 (WITH CWA200 REGION ALONG WITH ANCHOR MOTIF UNDERLINED)**

¹MPVANKPEGTVHTTYSWKDNIIPDTTKPGTKYGI
EVNFPDGSTKDVPVEVKVTS
ASDYQNQKJDTKQIIAKYKGNI
PQASDGIANKDQATKEGD
KDFPSLADVLAPNGIQWK
KNFEPDLSKPGLTS
GEAILTFKDGSTA
EVТИV
LVQTDADRNPET
QT
TIK
LPG
QTV
N
P
EDGVINLHKPG
ENN
PQLPDGT
KVTFDN
QSDV
DDFT
KHG
MPG
SDKS
FDAT
VTYP
DGT
TD
KIKLP
VH
ITAD
NEV
NTP
ITQ
GII
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DSV
PD
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GIAN
LKK
ATT
KEG
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PAL
PENT
TVE
WV
NPG
QM
KTE
LEN
AKGG
TTK
NYDA
VVI
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GLISNDNSEKNSHMINANVN
TKSRNSLSAKQNRLPQTGSETGLSALGLAMSLVGL
GFLIKKRKED⁹⁷⁴

Figure 2C

C370 SEQUENCE RESULTING FROM GENOMIC SEQUENCING OF *L. JENSENII* 1153 (WITH CWA200 REGION ALONG WITH ANCHOR MOTIF UNDERLINED)

¹MFYQIDPALAPYIDKIVFSRALLSDGEATKDTNEVPGATNVWTSGVLTTQNGPIRA
ALAGSTSSTYKIYLKADTPNSILSKPLSFTMWARYSSGHDMVSDFSKNLILNDNETT
FSSNNFFKSLDIVNNDPILDNMSVDYSNKTVNTRYRVNGSLLGDKSNLTLRIRGND
NLLKLIDKVKISNKTYTLANNTLYRTGELYINDIGGSLGFLSSLNRQDFNVTYLYK
NGKSFADALTSESQKFDFQFGIYDTTDYATAFHSLDTVNSLSTKTYTTGDKYNNQT
YDLSTFKTILDKLICKQKQDNPTTYLSFEDKKISATEENNPyEAVKLAESPTFTNISIAKS
LVNAADCKQLDNTAKWAWDNGARDLLKYLDVATKVASYIHLEFPTKPTDFSGLL
LRYTRAGTFISAVSDRDGVLDITEIDNSYGMNPSVYDTDGDGISDGQELREGRDPG
VAPFNWTDANGNQLSIDVDTTISGQLGNHNYHNEVMQPRTVNLYKVDDTGKKT
AYTSAVDQNGSFTLSKFTLNKGDKLVI¹⁹⁰³GYVTPRTNKS¹⁹⁰⁴LTDKDTILQQAFPTEQFSNE
IIVKGKQVTVTFMNGVSDDENQDIKVEKDSSFNKDSL¹⁹⁰⁵LPTPMKTGYSFKEWNTQ
ADGKGT¹⁹⁰⁶VVTADTIFDTDTVYAI¹⁹⁰⁷GEKIKLPNPTNIKAETRTDDKTSQETIITGKATPG
ATVTIKDNLGNEIGTVANDAGNFEIKTTSPLAEATKVS¹⁹⁰⁸VEATGGESSDAVEATVE
QNNFQKGNPLIQPASPTAVTAVTIKAS¹⁹⁰⁹DGTNNSTVTGKAAAGETVTVKDSSGNEIG
TGVVGEDGTFTTNKPIAENERIQVVVTKDDAESEPT¹⁹¹⁰TEAVVTAKTEPTNPTEVTAKT
LPDGNSDSTIVAGKGKAGE
VVTVKNDAGKVIGTGKVSSDDGTFSIKTDEVIEPGKQVS¹⁹¹¹VITNDGMDSIPVPVTVSGE
TITSIKQS¹⁹¹²AKAAVDNLTYLNNAQKQS¹⁹¹³AKDAIDSANTVDEITTAKNNAVSTD¹⁹¹⁴TNMKDL
SEDTKLAADKTQDPYLNADLDKKQAYDKAVEEEAQKLLNKETGTSVGADKDPAEVA
RIKQAVDDAYDALNGNSSLDDAKQKAKDAV¹⁹¹⁵DKNYTNLNDKQKETAKKRIDS¹⁹¹⁶AKSE
DEVNNADKINSGLNEKM¹⁹¹⁷GELKEVS¹⁹¹⁸NLS¹⁹¹⁹DKIETTS¹⁹²⁰SNYS¹⁹²¹NADSDKKQAYKETAD¹⁹²²KIHET
VAPSGDDLTTDDVNNL¹⁹²³ITDEATKRAALNGDAREKARQE
LENNYN¹⁹²⁴NSGKSLQDG¹⁹²⁵STLDPRYYN¹⁹²⁶ASEEK¹⁹²⁷KQAFQK¹⁹²⁸AKLDN¹⁹²⁹AKK¹⁹³⁰AKLDN¹⁹³¹SETTEAEYKSA
NDELQKAKADLG¹⁹³²QTTDKSKL¹⁹³³DDAIK¹⁹³⁴DANNA¹⁹³⁵AKG¹⁹³⁶TDK¹⁹³⁷YKN¹⁹³⁸AS¹⁹³⁹DDT¹⁹⁴⁰KS¹⁹⁴¹KF¹⁹⁴²DEALK¹⁹⁴³KA
EEVKNN¹⁹⁴⁴SNATQ¹⁹⁴⁵KEV¹⁹⁴⁶DDATNNL¹⁹⁴⁷KQAQNN¹⁹⁴⁸LNGQTTDKSKL¹⁹⁴⁹DDAIK¹⁹⁵⁰DANNA¹⁹⁵¹AKG¹⁹⁵²TDK¹⁹⁵³Y
KNAS¹⁹⁵⁴DDT¹⁹⁵⁵KS¹⁹⁵⁶KF¹⁹⁵⁷DALK¹⁹⁵⁸KAEEV¹⁹⁵⁹KN¹⁹⁶⁰NSNATQ¹⁹⁶¹KEV¹⁹⁶²DDATNNL¹⁹⁶³KQAQND¹⁹⁶⁴LDGQTT¹⁹⁶⁵NKDTL¹⁹⁶⁶NS
KLDEAITD¹⁹⁶⁷DANNT¹⁹⁶⁸KL¹⁹⁶⁹TD¹⁹⁷⁰YNN¹⁹⁷¹AS¹⁹⁷²DDT¹⁹⁷³KS¹⁹⁷⁴KF¹⁹⁷⁵DEALK¹⁹⁷⁶KAEN¹⁹⁷⁷V¹⁹⁷⁸KND¹⁹⁷⁹S¹⁹⁸⁰NATQ¹⁹⁸¹KEV¹⁹⁸²DDATNNL¹⁹⁸³
NLKQAQND¹⁹⁸⁴LDGQTT¹⁹⁸⁵DKSKL¹⁹⁸⁶DEAITD¹⁹⁸⁷ANNT¹⁹⁸⁸K¹⁹⁸⁹TD¹⁹⁹⁰YNN¹⁹⁹¹AS¹⁹⁹²DDT¹⁹⁹³KS¹⁹⁹⁴KF¹⁹⁹⁵DEALK¹⁹⁹⁶KAEE
VKNN¹⁹⁹⁷NSNATQ¹⁹⁹⁸KEV¹⁹⁹⁹DDATNNL²⁰⁰⁰KQAQNN²⁰⁰¹LDGQTT²⁰⁰²DKSKL²⁰⁰³DEAITD²⁰⁰⁴ANNT²⁰⁰⁵K²⁰⁰⁶TD²⁰⁰⁷YK²⁰⁰⁸NA
S²⁰⁰⁹DDT²⁰¹⁰KS²⁰¹¹KF²⁰¹²DALK²⁰¹³KAEEV²⁰¹⁴KN²⁰¹⁵NSNATQ²⁰¹⁶KEV²⁰¹⁷DDATNNL²⁰¹⁸KQAQND²⁰¹⁹LDGQTT²⁰²⁰NKDTL²⁰²¹NS
AIKDANDAKG²⁰²²TDK²⁰²³YKN²⁰²⁴AS²⁰²⁵DDT²⁰²⁶KS²⁰²⁷KL²⁰²⁸DE²⁰²⁹TL²⁰³⁰KKAAEV²⁰³¹V²⁰³²NN²⁰³³NA²⁰³⁴TQ²⁰³⁵KEV²⁰³⁶DDATNNL²⁰³⁷KQ
AQND²⁰³⁸LDGQTT²⁰³⁹DKSKL²⁰⁴⁰DEAIK²⁰⁴¹SADD²⁰⁴²TK²⁰⁴³YNN²⁰⁴⁴AS²⁰⁴⁵DDT²⁰⁴⁶KS²⁰⁴⁷KF²⁰⁴⁸DEALK²⁰⁴⁹KAEEV²⁰⁵⁰V²⁰⁵¹NN²⁰⁵²NS
NATQ²⁰⁵³KEV²⁰⁵⁴DDAT²⁰⁵⁵KNL²⁰⁵⁶KQAQND²⁰⁵⁷LDGQTT²⁰⁵⁸NKDAINDAIK²⁰⁵⁹DANNA²⁰⁶⁰AKG²⁰⁶¹TD²⁰⁶²YNN²⁰⁶³AS²⁰⁶⁴DDT
KS²⁰⁶⁵KF²⁰⁶⁶DALK²⁰⁶⁷KAEDV²⁰⁶⁸V²⁰⁶⁹N²⁰⁷⁰DS²⁰⁷¹NA²⁰⁷²Q²⁰⁷³KEV²⁰⁷⁴DDAT²⁰⁷⁵KNL²⁰⁷⁶K²⁰⁷⁷N²⁰⁷⁸LN²⁰⁷⁹L²⁰⁸⁰K²⁰⁸¹G²⁰⁸²Q²⁰⁸³PA²⁰⁸⁴KK²⁰⁸⁵R²⁰⁸⁶K²⁰⁸⁷D²⁰⁸⁸EA²⁰⁸⁹

Figure 3

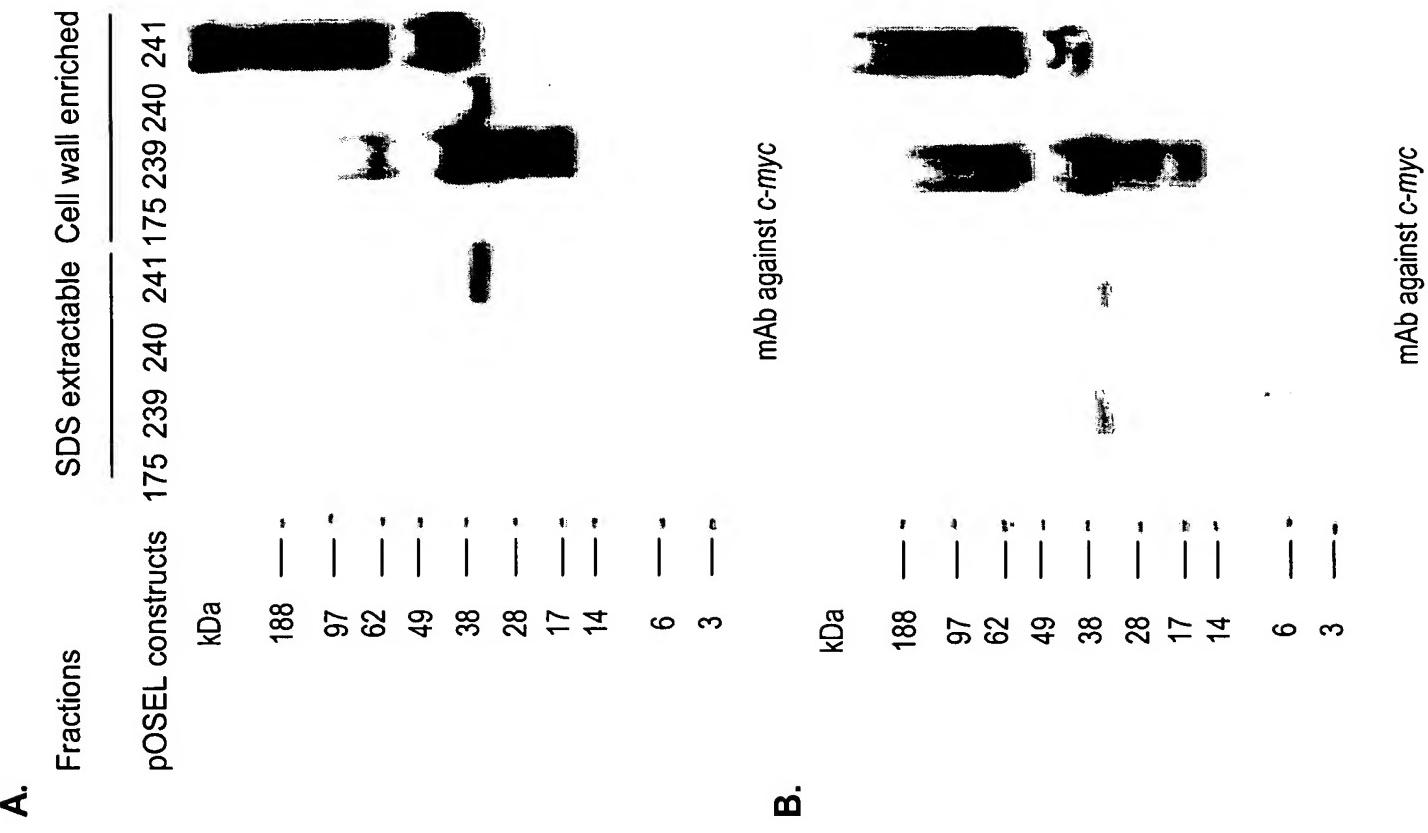


Figure 4

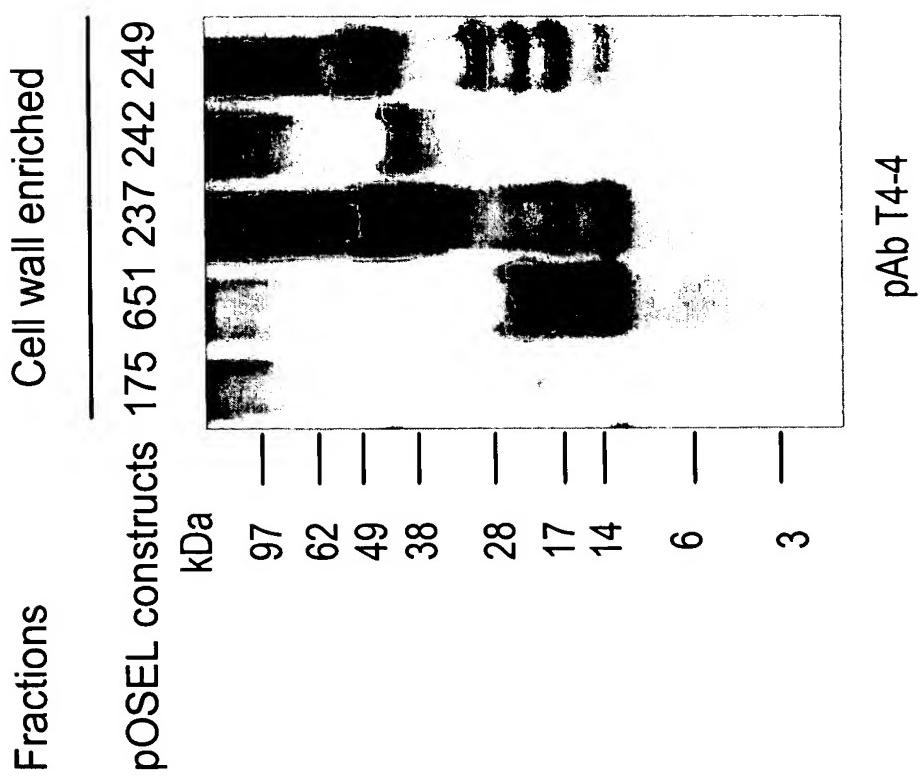


Figure 5

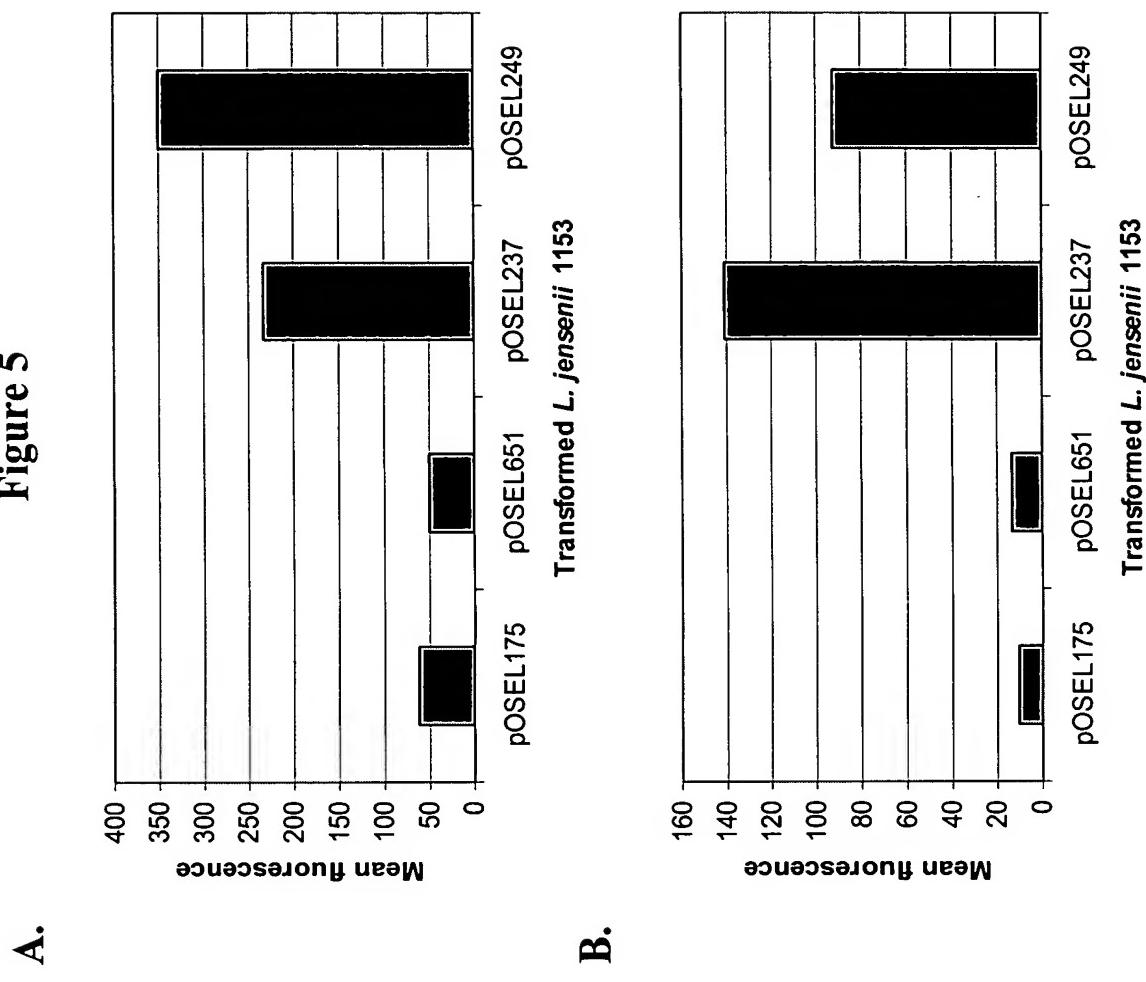


Figure 6

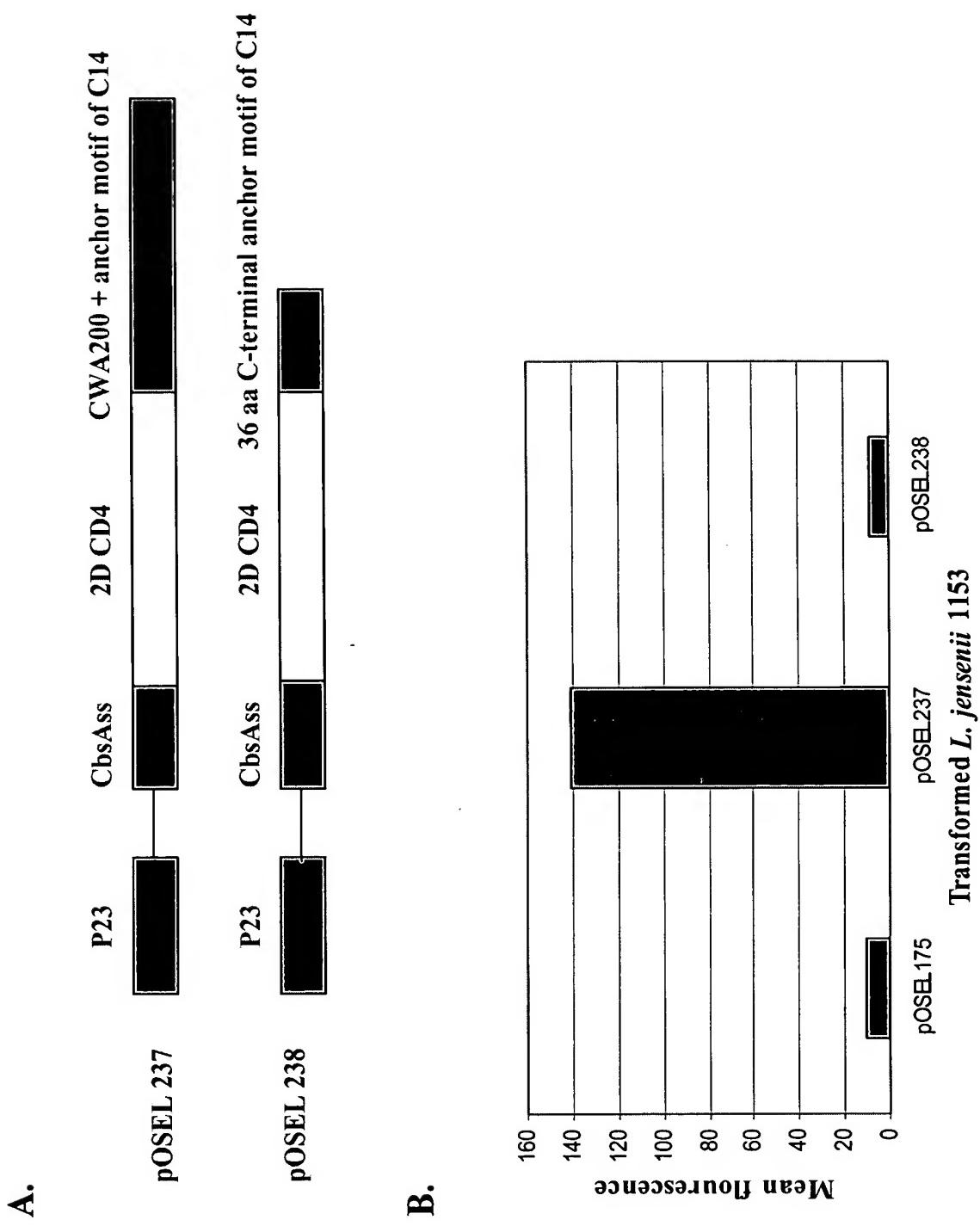


Figure 7

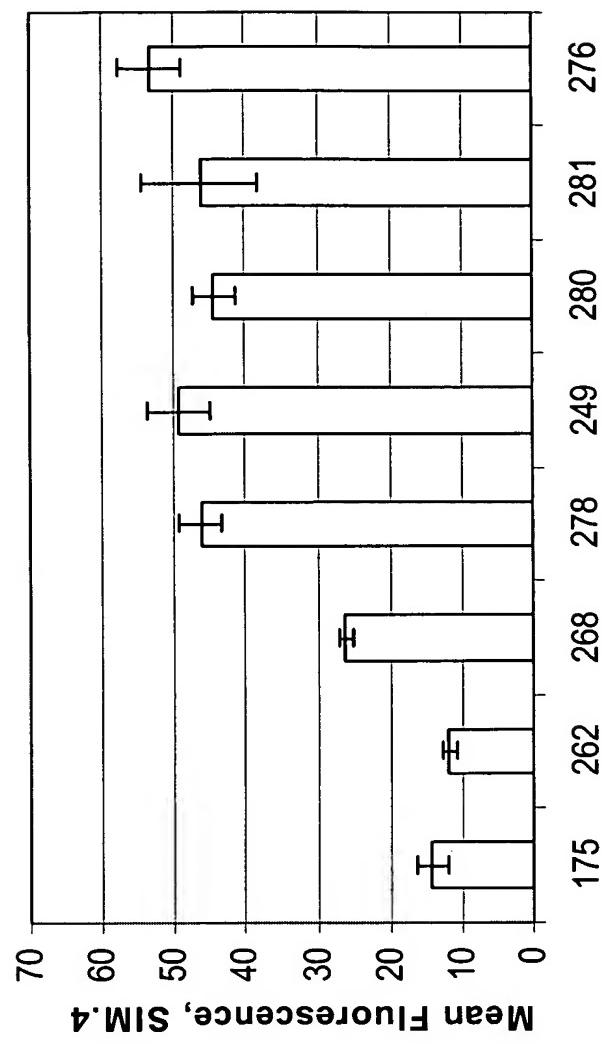


Figure 8

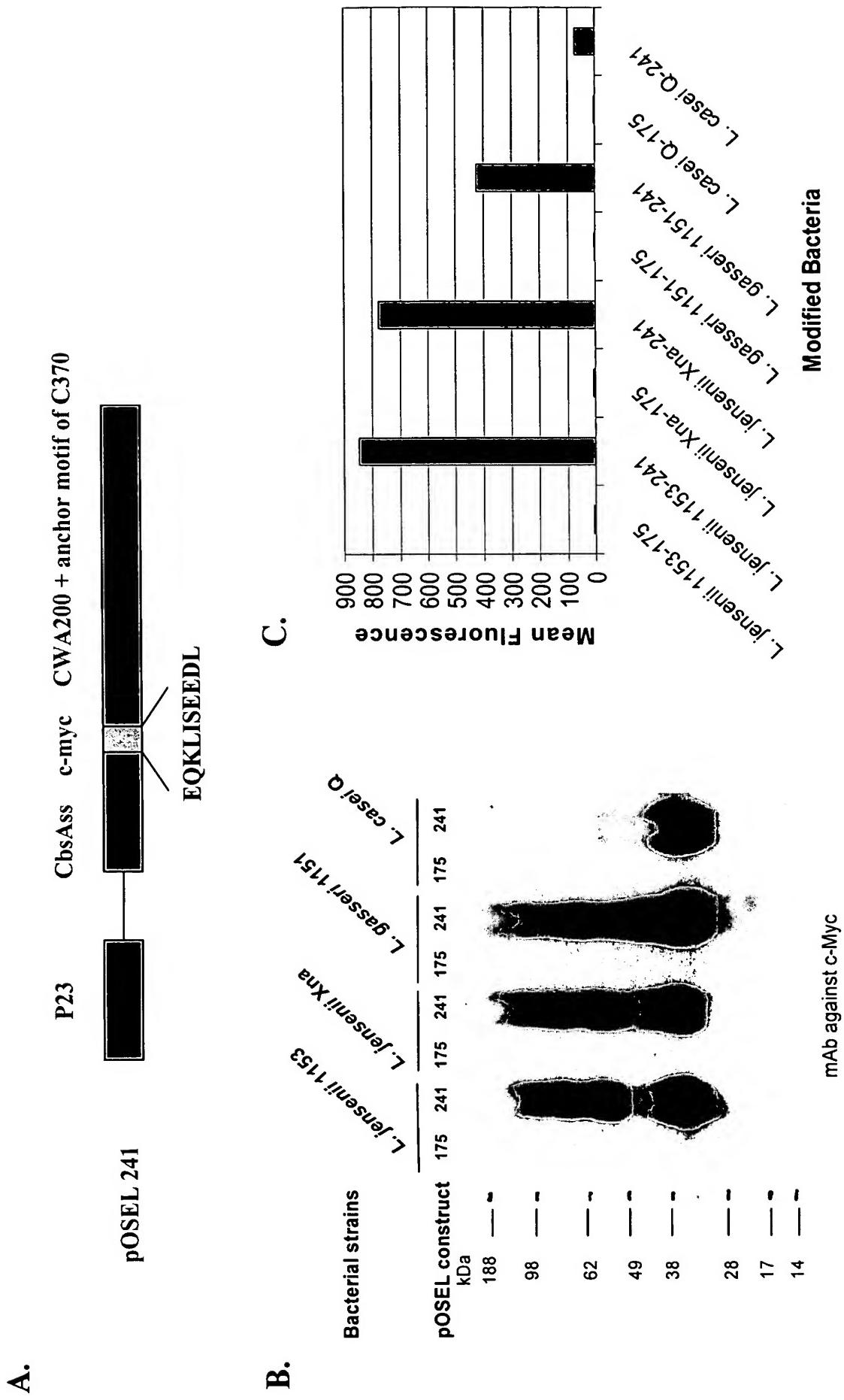


Figure 9

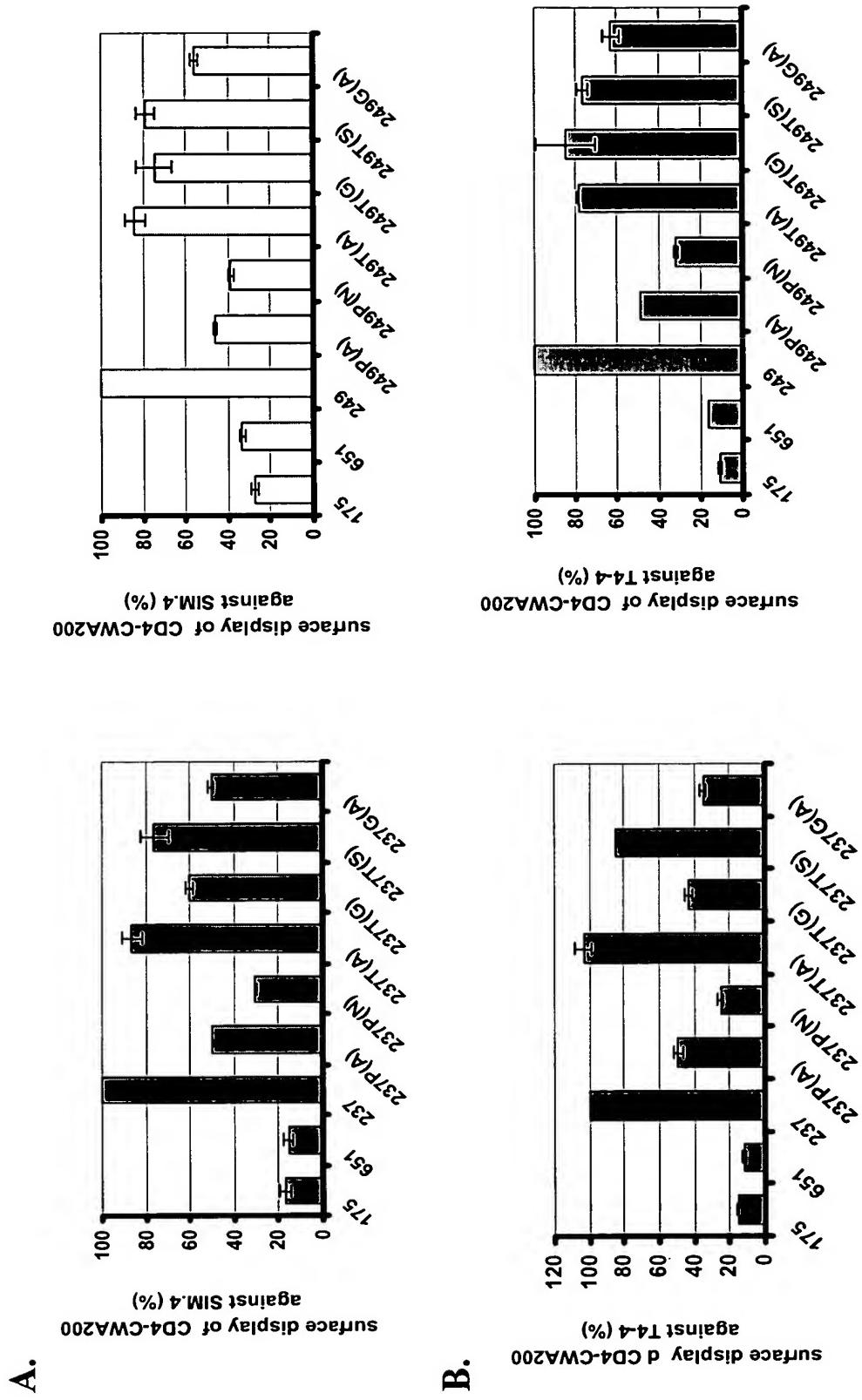


Figure 10

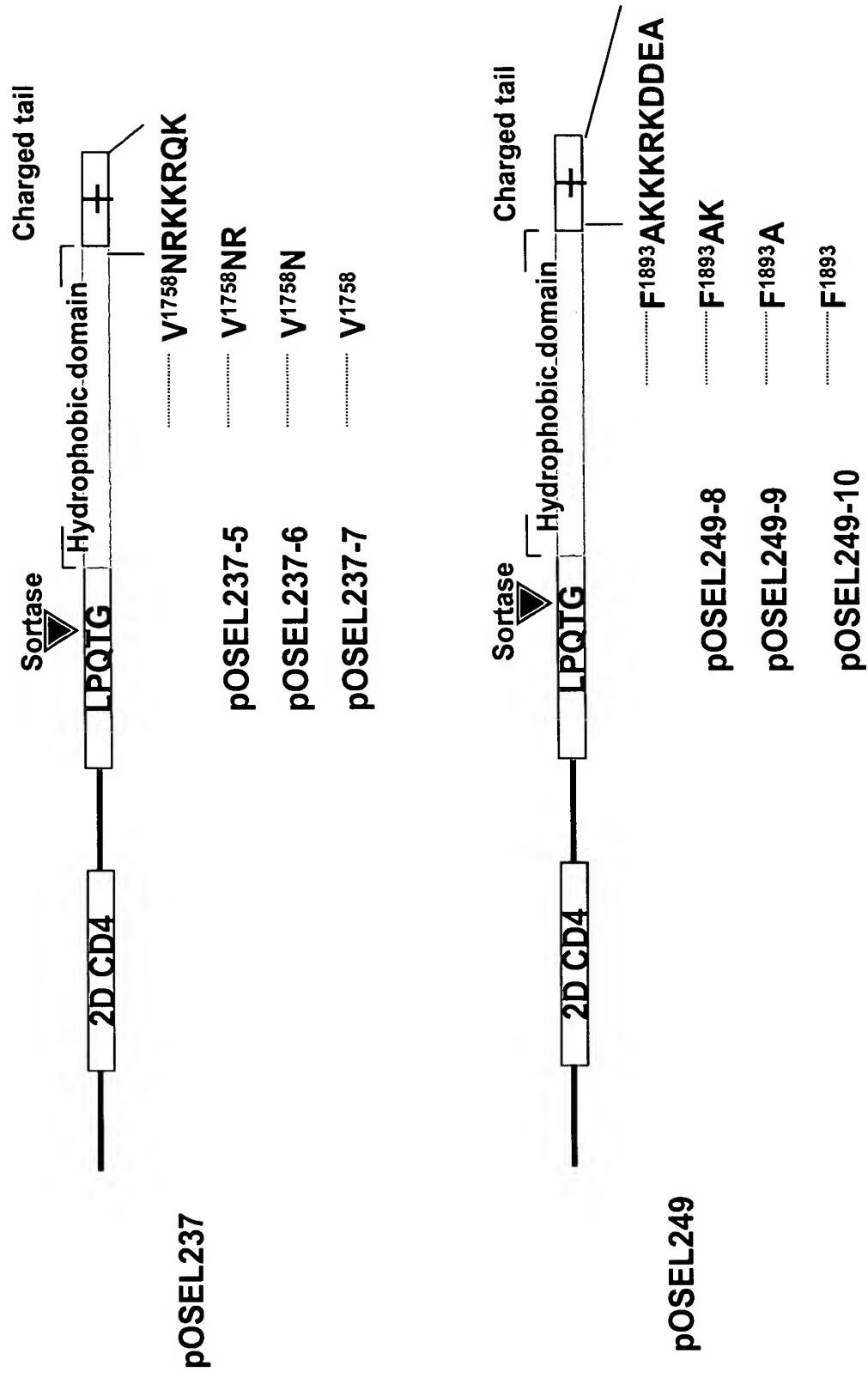


Figure 11

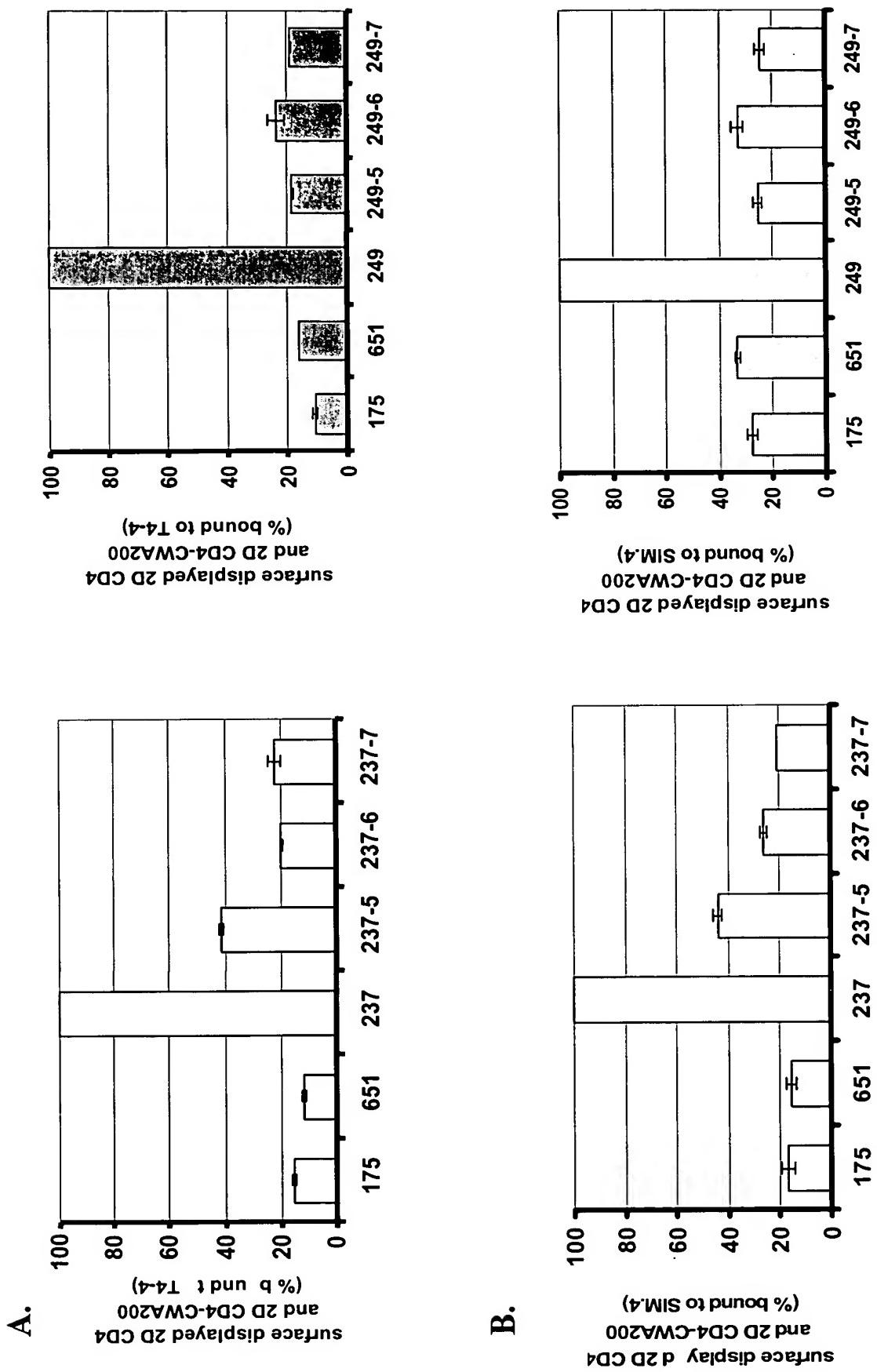


Figure 12

